

Survey Methods

The list sampling frame maintained by Michigan Agricultural Statistics was the primary source of names of commercial fruit farms. Commercial meant any operation with at least one acre of any tree fruit or one half acre of any berry. Data were collected for every qualifying fruit operation.

Questionnaires and cover letters were mailed to fruit farms on the list frame in October 2003. Growers who responded to the 2000 Fruit Inventory were also sent a printout of their responses to that inventory. Data collection continued until the spring of 2004.

The apple section of the survey instrument is shown at the end of this section. Farmers were asked to complete, by block (vineyard or plantation), the block name or number, the county, township and section where that block was located, variety, rootstock, irrigation type, year of planting, trees, acres and spacing for each variety in the block. Each line within a block represents a different variety, rootstock, year planted or plant spacing.

These detailed data were obtained for 86 percent of the farms. Twenty-five percent were returned by mail, 34 percent were completed by telephone, and 27 percent were done by personal interview. Ten percent refused to do the inventory, and four percent could not be contacted. Estimates of total acres of each fruit were made from various sources for the farms for which detailed block records were not available.

The completion rates of the detailed data varied by region and by fruit type. They were calculated by dividing the total acres with complete block data by those acres summed with estimated acres for refusals and inaccessibles. These rates are shown as percentages in the accompanying table. Inverses of those completion rates were used to expand detailed data to total acreage totals by fruit and district. The higher the completion rate for a district and fruit, the more accurate are the detailed data shown in the two-way and three-way tables of this bulletin.

Completion rates: Percent of acreage completed by fruit and district

District	Apples	Blue-berries	Bram-bles	Cherries, sweet	Cherries, tart	Cran-berries	Grapes	Necta-rines	Peaches	Pears	Plums	Straw-berries	Total
Northwest	84.9	88.0	74.1	83.2	87.1	100.0	86.5	66.7	79.3	87.0	79.6	87.2	85.4
Mason-Oceana	80.2												
Grand Rapids	74.8												
West Central	76.0	84.6	83.3	79.0	77.1	100.0	100.0	94.4	76.4	87.6	79.4	84.4	77.9
Southwest	72.3	91.9	42.7	84.3	83.7	100.0	87.6	90.9	79.6	78.5	84.6	73.1	84.0
East	83.8	79.2	91.3	92.8	81.5	87.5	96.6	88.9	85.6	80.6	86.7	81.3	84.0
Michigan	76.6	89.1	70.9	82.6	83.3	99.2	87.7	89.4	78.3	84.4	81.7	80.4	82.1